

REMARKS

In the Office Action, claims 1-17 were rejected. Claims 1-3, 6, 10 and 15 have been amended, claims 5 and 12 have been canceled, and new claims 18-21 have been added. Upon entrance of this Response, claims 1-4, 6-11 and 13-21 will be pending in the present application. Reconsideration is respectfully requested.

Rejections Under 35 U.S.C. § 102

In the Office Action, the Examiner rejected claims 1-3, 5-10, 12, 14 and 15 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,887,164 to Dewanjee et al. The Examiner also rejected claims 1-3, 5-10, 12, 14 and 15 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,857,973 to Wieland et al. Applicants respectfully disagree.

Each of independent claims 1, 10 and 15, as amended, recites an iron-type golf club head comprising a "body including a front wall having a ball-striking surface, a rear surface having an external rear cavity formed therein, a toe end and a heel end, the front wall being integrally formed with the body." Thus, the body of the club head is integrally formed to include the front wall, rear surface and toe and heel ends of the club head.

Dewanjee et al. and Wieland et al. fail to teach or disclose a body having an integrally formed front wall. Instead, Dewanjee et al. and Wieland et al. both disclose an iron-type golf club head that includes three separate components: a periphery member; a central member; and a face plate. The periphery member, which is composed of a high density material, includes a sole wall, toe wall, heel wall, top wall and hosel, but no front wall having a ball-striking surface. The face plate, which provides the ball-striking surface, is composed of a titanium alloy material and is coupled to the periphery member along with the central member to form the golf club head. Since Dewanjee et al. and Wieland et al. do not teach or suggest "a front wall...integrally formed

with the body,” neither Dewanjee et al. nor Wieland et al. anticipate independent claims 1, 10 and 15. Applicants respectfully submit that independent claims 1, 10 and 15 and their dependent claims 2, 3, 6-9 and 14 are patentable over Dewanjee et al. and Wieland et al.

Applicants further submit that neither Dewanjee et al. nor Wieland et al. may be used as prior art under 35 U.S.C. § 103. In accordance with 35 U.S.C. § 103(c), both Dewanjee et al. and Wieland et al. qualify as prior art only under 35 U.S.C. § 102(e), and the subject matter of Dewanjee et al., Wieland et al. and the claimed invention were, at the time the claimed invention was made, owned by the same person, Callaway Golf Company. The recorded assignment information for the Dewanjee et al. patent is found at reel/frame 014374/0828, for the Wieland et al. patent at reel/frame 014031/0139, and for the present application at reel/frame 015058/0812.

Rejections Under 35 U.S.C. § 103

The Examiner also rejected claims 1-6 under 35 U.S.C. § 103(a) as being unpatentable over Japanese Reference No. 10-005378 A to Kajita in view of U.S. Patent No. 5,540,436 to Boone. Claims 8, 10-13 and 15-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kajita in view of Boone and further in view of Official Notice. Applicants respectfully disagree.

Independent claim 1, as amended, recites an iron-type golf club head including a body having a rear surface with an external rear cavity formed therein, the rear surface including upper and lower portions, the lower portion having a notch formed therein, “the upper portion being separated from the lower portion by the external rear cavity and at least one groove,...wherein the at least one groove extends from the external rear cavity proximate an open end of the notch toward one of the heel end and the toe end.” As best illustrated in Fig. 3, the rear surface 54 of the golf club head includes an upper portion 58 and a lower portion 60 and has an external rear

cavity 56 formed therein. A notch 62 is formed in the lower portion of the rear surface and communicates with the external rear cavity. The upper and lower portions of the rear surface are separated by the external rear cavity and at least one of a first groove 64 and a second groove 66. The first groove extends from the external rear cavity proximate the open end of the notch toward the heel end, while the second groove extends from the rear cavity proximate the open end of the notch toward the toe end.

The combination of Kajita and Boone fails to suggest an iron-type golf club head having “at least one groove extend[ing] from the external rear cavity proximate an open end of the notch toward one of the heel end and the toe end.” Kajita discloses a perimeter weighted iron-type golf club head having rigidity relieving grooves formed in the rear surface of the body. The grooves 10, which are formed in the perimeter weighted portion 4 of the body, have a depth equal to the thickness of the perimeter weighted portion and extend along a line V or H that passes through the sweet spot S of the head. See Kajita, para. 6, lines 12-15, para. 9, lines 1-4 and Figs. 1 and 2. Boone discloses an iron including a low density insert. The iron has an open rear cavity 28, a perimeter undercut 34, and a notch or slot 32 formed in the lower portion of the rear surface. The low density insert 30 prevents dirt and moisture from accumulating in the region between the cavity and the surrounding perimeter of the club. Boone teaches away from its combination with Kajita; the Boone insert 30 is designed to keep dirt and moisture out of the perimeter undercut, while Kajita’s deep grooves, which extend from the rear cavity to the exterior of the club head, would enable dirt and moisture into the perimeter undercut region. Furthermore, the combination of Kajita and Boone would not result in the at least one groove extending from “proximate an open end of the notch toward one of the heel end and the toe end.” As illustrated in Fig. 2 of the Kajita reference, neither groove 10 would be located proximate the notch 32 in

any of the irons depicted in Figs. 4 and 7-14 of the Boone patent. Accordingly, Applicants respectfully submit that independent claim 1 is patentable over the combination of Kajita and Boone. Claims 2-4, 6 and 8 depend from claim 1 and, for at least this reason are also patentable over Kajita in view of Boone.

Each of independent claims 10 and 15, as amended, recites an iron-type golf club head including a body having a rear surface with an external rear cavity and a notch formed therein and first and second grooves, "the first groove extending from the external rear cavity toward the heel end, and the second groove extending from the external rear cavity toward the toe end, and wherein the first groove is not collinear with the second groove." The non-collinearity of the first groove 64 and the second groove 66 is best illustrated in Fig. 3.

Applicants respectfully submit that no combination of Kajita and Boone could make obvious the invention of claim 10 or 15. Because Kajita discloses that the grooves 10 should extend along a vertical line V or horizontal line H that passes through the sweet spot S of the club head, the combination of Kajita and Boone would result in a golf club head having collinear, rather than non-collinear, grooves. Thus, Applicants respectfully submit that independent claims 10 and 15 and their dependent claims 13, 16 and 17 are patentable over the combination of Kajita and Boone.

New Claims 18-21

Applicants have added new claims 18-21 and respectfully request their consideration. Claims 18 and 19 depend indirectly from claim 1. Claim 18 recites that the at least one groove extends downward toward a bottom wall of the club head. Support for claim 18 may be found in Fig. 3. Claim 19 recites that the first groove is not collinear with the second groove, which as discussed above is not made obvious by the combination of Kajita and Boone. Claims 20 and 21

depend from claims 10 and 15, respectively, and recite that the first groove extends downward toward a bottom wall of the club head. No new matter has been added.

In view of the foregoing remarks, Applicants respectfully submit that each of the outstanding rejections has been overcome and that the pending claims are in condition for allowance. A Notice of Allowance is respectfully requested. The Examiner is invited to telephone Applicants' Attorney, if such would advance the prosecution of this case.

Respectfully submitted,

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